

Appln No. 10/628,026  
Amdt date December 28, 2006  
Reply to Office action of September 28, 2006

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Emended)      An optical communication device, comprising:  
a laser diode for emitting an optical transmission beam;  
a reflective mirror ~~that reflects~~ adapted to reflect a first portion of the optical transmission beam to an end face of an optical fiber; and  
~~an edge illumination~~ a monitor photodetector, having a light receiving facet that receives  
adapted to receive a second portion of the optical transmission beam, the monitor photodetector  
being configured such that the second portion of the optical transmission beam enters the light  
receiving facet of the monitor photodetector to be applied at a light detection area adjacent  
another facet of the monitor photodetector, the monitor photodetector producing being adapted to  
produce a control signal as a function of the received second portion of the optical transmission beam.
2. (Original)    The optical communication device of claim 1 further comprising a focusing lens optically coupled to the reflective mirror for focusing the reflected optical beam into the end face of the optical fiber.
3. (Original)    The optical communication device of claim 1, wherein the laser diode comprises an edge emitting laser.
4. (Original)    The optical communication device of claim 1, wherein the laser diode and the reflective mirror are coupled to a TO header, and wherein the reflective mirror is swept at an angle to reflect the first portion of the optical transmission beam to the optical fiber.

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5. (Original) The optical communication device of claim 4 wherein the reflective mirror is swept an angle in the range of about 43-47 degrees relative to the TO header.

6. (Currently Amended) The optical communication device of claim 5 wherein the light receiving facet of the ~~edge illumination~~ monitor photodetector is swept at an angle relative to the TO header.

7. (Currently Amended) The optical communication device of claim 1 further comprising a gain stage coupled to the ~~edge illumination~~ monitor photodetector ~~that converts and~~ adapted to convert the control signal to a voltage proportional to the intensity of the optical transmission beam and a control ~~that compares~~ adapted to compare the voltage to a reference voltage and ~~adjusts~~ to adjust drive current of the laser diode in accordance with the comparison.

8. (Original) The optical communication device of claim 2, further comprising a laser diode isolator disposed between the focusing lens and the optical fiber.

9. (Original) The optical communication system of claim 1 wherein the monitor photodetector comprises a p-i-n photodetector.

10. (Original) The optical communication system of claim 1 wherein the monitor photodetector is coupled to the reflective mirror.

11. (Original) The optical communication system of claim 1 wherein the reflective mirror comprises a silicon reflective mirror.

12. (Currently Amended) A method for transmitting an optical signal, comprising:  
emitting the optical signal;  
reflecting a first portion of the optical signal to an end face of an optical fiber;

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receiving a second portion of the optical signal on a light receiving facet of ~~an edge illumination~~ a monitor photodetector, wherein the second portion of the optical signal enters the light receiving facet of the monitor photodetector and is applied at a light detection area adjacent another facet of the monitor photodetector; and

generating a control signal proportional to intensity of the optical signal as a function of the received second portion of the optical signal.

13. (Original) The method of claim 12 further comprising converting control signal to a voltage that is proportional to intensity of the optical signal and adjusting intensity of the optical signal in accordance with the voltage.

14. (Original) The method of claim 12 further comprising focusing the reflected optical signal into the end face of the optical fiber.

15. (Currently Amended) An optical communication device, comprising:  
a laser diode for emitting an optical transmission beam from a first facet of the laser diode;

a reflective mirror ~~that reflects~~ adapted to reflect a first portion of the optical transmission beam emitted from the first facet of the laser diode to an end face of an optical fiber; and

~~an edge illumination~~ a monitor photodetector, having a light receiving facet ~~that receives~~ adapted to receive a second portion of the optical transmission beam emitted from the first facet of the laser diode, the monitor photodetector being configured such that the second portion of the optical transmission beam enters the light receiving facet of the monitor photodetector to be applied at a light detection area adjacent another facet of the monitor photodetector, wherein the monitor photodetector ~~produces~~ is adapted to produce a control signal as a function of the received second portion of the optical transmission beam.

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16. (Original) The optical communication device of claim 15 further comprising a focusing lens optically coupled to the reflective mirror for focusing the reflected optical beam into the end face of the optical fiber.

17. (Original) The optical communication device of claim 15, wherein the laser diode comprises an edge emitting laser.

18. (Original) The optical communication device of claim 15, wherein the laser diode and the reflective mirror are coupled to a TO header, and wherein the reflective mirror is swept at an angle to reflect the first portion of the optical transmission beam to the optical fiber.

19. (Original) The optical communication device of claim 18 wherein the reflective mirror is swept an angle in the range of about 43-47 degrees relative to the TO header.

20. (Currently Amended) The optical communication device of claim 18 wherein the light receiving facet of the ~~edge illumination~~ monitor photodetector is swept at an angle relative to the TO header.

21. (Currently Amended) The optical communication device of claim 15 further comprising a gain stage coupled to the ~~edge illumination~~ monitor photodetector ~~that converts and adapted to convert~~ the control signal to a voltage proportional to the intensity of the optical transmission beam and a control ~~that compares~~ adapted to compare the voltage to a reference voltage and ~~adjusts~~ to adjust drive current of the laser diode in accordance with the comparison.

22. (Original) The optical communication device of claim 16, further comprising a laser diode isolator disposed between the focusing lens and the optical fiber.

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23. (Original) The optical communication system of claim 15 wherein the monitor photodetector comprises a p-i-n photodetector.

24. (Original) The optical communication system of claim 15 wherein the reflective mirror comprises a silicon reflective mirror.

25. (New) The optical communication device as claimed in Claim 1, wherein the monitor photodetector is configured to receive the second portion of the optical transmission beam directly from the laser diode.